

ABSTRACT

A hydraulic platform lift for use with a truck or trailer, having hydraulic pump means and first and second hydraulic cylinders each having a piston member therein, each operatively coupled to a respective side edge of a platform to permit raising and lowering of the platform. A positive displacement valve is provided, alone and in combination with the hydraulic platform lift, which permits powered raising and lowering of the platform, and comprises a pair of juxtaposed cylinder members, each containing a longitudinally-movable piston, such pistons operatively coupled to each other so that movement of one piston causes an equal movement of the other, each cylinder member having a pair of opposite ends, one end of which having an aperture to permit ingress of hydraulic fluid from the pump means and another aperture at an opposite end to permit egress of hydraulic fluid from a corresponding cylinder member to one of the hydraulic cylinders. The positive displacement valve is adapted, when the pump means provides pressurized hydraulic fluid via a respective aperture to a first side of each of the pistons, to cause the pistons to be displaced an equal distance causing an equal egress of hydraulic fluid from the cylinder members via a respective aperture, with resultant equal movement of the piston members within the left and right hydraulic cylinders regardless of different loads which may be applied to the first and second hydraulic cylinders.

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